

PROPOSED RULEMAKING SHADING LEGEND

- * Shaded text - Rule sections or subsections not proposed for revision. This text is only for reference.
- * Unshaded Text - Rule sections or subsections that are proposed for revision.

10 CSR 10-3.090 Restriction of Emission of Odors.

- (1) Application. This rule shall apply throughout Missouri except in the City of St. Louis and St. Charles, St. Louis, Jefferson, Franklin, Clay, Cass, Buchanan, Ray, Jackson, Platte and Greene Counties.
- (2) Restriction of Emission of Odors. No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one (1) volume of odorous air is diluted with seven (7) volumes of odor-free air for two (2) separate trials not less than fifteen (15) minutes apart within the period of one (1) hour.
- (3) Exceptions.
 - (A) The provisions of section (2) of this rule shall not apply to the emission of odorous matter from the pyrolysis of wood in the production of charcoal in a Missouri-type charcoal kiln.
 - (B) The provisions of section (2) of this rule shall not apply to the emission of odorous matter from the raising and harvesting of crops nor from the feeding, breeding and management of livestock or domestic animals or fowl except as described in section (5) of this rule.
- (4) Method of Measurement. Measurements may be made with a scentometer as manufactured by the Barnebey & Sutcliffe Corporation or by a similar technique that will give equivalent results [~~as agreed to at the time by the source operator and the staff director~~].
- (5) Control of Odors from Class 1A Concentrated Animal Feeding Operations.
 - (A) Notwithstanding any provision in any other regulation to the contrary, all Class 1A concentrated animal feeding operations as defined in section 640.703(3), RSMo, operating on or after January 1, 1999, shall prepare and implement an odor control plan describing measures to be used to control odor emissions. The plan shall identify all sources of odor emissions and describe the measures to be used to reduce the overall odor emissions associated with the facility operations. The schedule for these activities shall be as follows:
 1. Not later than July 1, 2000, an odor control plan shall be submitted to the Air Pollution Control Program (APCP). The odor control plan shall contain the following:
 - A. A listing of all potentially innovative and proven odor control options for the facility. Odor control options may include odor reductions achieved through: odor prevention, odor capture and treatment, odor dispersion, add-on control devices, modifications to feed-stock or waste handling practices, or process changes;
 - B. A detailed discussion of feasible odor control options for the facility. The discussion shall include options determined by the facility to be infeasible. Determination of infeasibility should be well documented and based on physical, chemical and engineering

- principles demonstrating that technical difficulties would preclude the success of the control option;
- C. A ranking of feasible odor control options from most to least effective. Ranking factors shall include odor control effectiveness, expected odor reduction, energy impacts and economic impacts;
 - D. An evaluation of the most effective odor control options. Energy, environmental and economic impacts shall be evaluated on a case-by-case basis;
 - E. Description of the odor control options to be implemented by the facility;
 - F. A schedule for implementation. The schedule shall establish interim milestones in implementing the odor control plan prior to the implementation deadline; and
 - G. An odor monitoring plan;
- 2. The APCP, in consultation with the Water Pollution Control Program, shall review and approve or disapprove the odor control plan.
 - A. After the APCP receives an odor control plan they shall perform a completeness review. Within thirty (30) days of receipt, the APCP shall notify the facility if the plan contains all the elements of a complete odor control plan. If found incomplete, the APCP shall give the facility a written explanation of the plan's deficiencies.
 - B. Within sixty (60) days after determining an odor control plan submittal is deemed complete, the APCP shall approve or disapprove the plan. During this sixty (60)-day technical review period, the APCP may request additional information needed for review. If the plan is disapproved, the APCP shall give the owner or operator a written evaluation explaining the reason(s) for disapproval;
 - 3. Not later than March 1, 2001, the facility shall submit to the APCP a written progress report on implementing the odor control plan. The progress report shall, at a minimum, compare the actual schedule of implementation to that approved in the odor control plan;
 - 4. Not later than January 1, 2002, implementation of the odor control plan shall be complete and controls shall be operational.
- (B) Notwithstanding any provision in any other regulation to the contrary, all new Class 1A concentrated animal feeding operations, prior to commencement of construction, shall obtain approval from the APCP of an odor control plan as described above.
- (C) After January 1, 2002, no Class 1A concentrated animal feeding operation may cause, permit or allow the emission of odorous matter—
- 1. In concentrations and frequencies or for durations that the odor can be perceived when one (1) volume of odorous air is diluted with **seven (7)** [~~five and four tenths (5.4)~~] volumes of odor-free air for two (2) separate trials not less than fifteen (15) minutes apart within the period of one (1) hour. This odor evaluation shall be taken at a site not at the installation and will be used as a screening evaluation. A positive screening

evaluation for odor shall require an odor sample to be taken and evaluated by olfactometry as described in paragraph (5)(C)2. of this rule. These measurements may be made with a Scentometer as manufactured by the Barnebey & Sutcliffe Corporation or by a similar technique that will give equivalent results [~~as agreed to at the time by the source operator and the staff director~~]; and

2. When one (1) of the following conditions is met:

- A. In concentrations with a best estimate detection threshold, represented as $Z_{OL} \geq 110$, as determined using American Society for Testing and Materials Standard E 679-91 (Reapproved 1997) at an olfactometer flow rate of twenty (20) liters per minute; or
- B. At intensities greater than that of two hundred twenty-five (225) parts per million of n-butanol odorant in air, which serves as the reference scale, as determined by an olfactometry panel evaluation of a sample of the odorous air.

(D) The director may require an ambient air monitoring quality assurance project plan. This plan shall be approved by the director and include or reference the documented and approved standard operating procedures for monitoring, field collection and analysis for any Class 1A CAFO that exceeds the odor emission limits found in paragraph (5)(C)2. of this rule following implementation of its odor control plan. Monitoring shall be done for pollutants or gases reasonably expected to be emitted by the CAFO and implemented on a schedule as agreed to by the source operator and the staff director. Monitoring shall begin and continue as approved in the plan and shall not exceed eight (8) quarters of complete data unless subsequent violations are determined.